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<110> BEIRNAERT, Els Anna Alice

<120> SINGLE DOMAIN ANTIBODIES DIRECTED AGAINST INTERFERON-GAMMA AND USES THEREFOR

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<160> 84

<170> PatentIn version 3.1

<210> 1

<211> 124

<212> PRT

<213> Lama glama

<400> 1

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Thr Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asp Tyr
            20   25   30

Ala Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Arg Ile Leu Trp Thr Gly Ala Ser Arg Ser Tyr Ala Asn Ser Val
    50   55   60

Asp Gly Arg Phe Thr Val Ser Thr Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys
                85   90   95

Ala Ala Leu Pro Ser Asn Ile Ile Thr Thr Asp Tyr Leu Arg Val Tyr
            100   105   110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 2

<211> 123

<212> PRT

<213> Lama glama

<400> 2

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Thr Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asn Tyr
            20   25   30

Ala Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Arg Ile Lys Trp Ser Gly Gly Ser Arg Ser Tyr Ala Asn Ser Val
            50   55   60

Asp Gly Arg Phe Thr Val Ser Thr Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys
                85   90   95

Ala Leu Pro Ser Asn Ile Ile Thr Thr Asp Tyr Leu Arg Val Tyr Tyr
            100   105   110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 3

<211> 118

<212> PRT

<213> Lama glama

<400> 3

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ala Gly Ile Ser Gly Ser Val Phe
            20   25   30

Ser Arg Thr Pro Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg
            35   40   45

Glu Leu Val Ala Gly Ile Leu Thr Ser Gly Ala Thr Ser Tyr Ala Glu
            50   55   60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
65   70   75   80

Val Tyr Leu Gln Met Asn Ser Leu Ser Pro Glu Asp Thr Ala Glu Tyr
                85   90   95

Tyr Cys Asn Thr Tyr Pro Thr Trp Val Leu Ser Trp Gly Gln Gly Thr
            100   105   110

Gln Val Thr Val Ser Ser
        115

<210> 4

<211> 118

<212> PRT

<213> Lama glama

<400> 4

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ala Gly Ile Ser Gly Ser Val Phe
        20   25   30

Ser Arg Thr Pro Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg
        35   40   45

Glu Leu Val Ala Gly Ile Leu Ser Ser Gly Ala Thr Val Tyr Ala Glu
    50   55   60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
65   70   75   80

Val Tyr Leu Gln Met Asn Ser Leu Ser Pro Glu Asp Thr Ala Glu Tyr
                85   90   95

Tyr Cys Asn Thr Tyr Pro Thr Trp Val Leu Ser Trp Gly Gln Gly Thr
            100   105   110

Gln Val Thr Val Ser Ser
        115

<210> 5

<211> 118

<212> PRT

<213> Lama glama

<400> 5

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ala Gly Ile Ser Gly Ser Val Phe
            20   25   30

Ser Arg Thr Pro Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg
            35   40   45

Glu Leu Val Ala Gly Ile Leu Ser Ser Gly Ala Thr Ala Tyr Ala Glu
        50   55   60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
65   70   75   80

Val Tyr Leu Gln Met Asn Ser Leu Ser Pro Glu Asp Thr Ala Glu Tyr
                85   90   95

Tyr Cys Asn Thr Tyr Pro Thr Trp Val Leu Ser Trp Gly Gln Gly Thr
            100   105   110

Gln Val Thr Val Ser Ser
        115

<210> 6

<211> 113

<212> PRT

<213> Lama glama

<400> 6

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Glu
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Arg Gly Ile Phe Arg Phe Asn
            20   25   30

Ala Gly Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val
            35   40   45

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Ala Phe Ile Gly Val Asp Asn Thr Thr Arg Tyr Ile Asp Ser Val Lys
    50                  55                  60


Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Val Tyr Leu
65                  70                  75                      80


Gln Met Asn Ser Leu Gln Pro Glu Asp Thr Ala Val Tyr Tyr Cys Asn
                85                  90                  95


Lys Val Pro Tyr Ile Asp Trp Gly Gln Gly Thr Gln Val Thr Val Ser
            100                 105                 110


Ser


<210>  7

<211>  126

<212>  PRT

<213>  Lama glama


<400>  7

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1               5               10                  15


Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr
            20                  25                  30


Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35                  40                  45


Ala Gly Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val
    50                  55                  60


Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65                  70                  75                      80


Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys
                85                  90                  95


Ala Ser Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp
            100                 105                 110


Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115                 120                 125
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<210> 8

<211> 126

<212> PRT

<213> Lama glama

<400> 8

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr
                20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Gly Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val
        50   55   60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys
                85   90   95

Ala Ser Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp
            100   105   110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120   125

<210> 9

<211> 126

<212> PRT

<213> Lama glama

<400> 9

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ile Tyr
        20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Ala Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val
    50   55   60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Ile Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys
                85   90   95

Ala Ser Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Glu
            100   105   110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120   125

<210>   10

<211>   126

<212>   PRT

<213>   Lama glama

<400>   10

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Asn Ile Tyr
        20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Asp Phe Val
        35   40   45

Ala Ala Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val
    50   55   60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys
                85   90   95

Ala Ser Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp
            100   105   110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210> 11

<211> 126

<212> PRT

<213> Lama glama

<400> 11

Gln Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Asn Asn Tyr
        20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Ala Ile Ser Trp Asn Gly Gly Ser Thr Tyr Tyr Asp Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Asn Asn Leu Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Asn Phe Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Cys Ala Ala Asn Pro Tyr Gly Ile Pro Gln Tyr Arg Glu Asn Arg
            100   105   110

Tyr Asp Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210> 12

<211> 126

<212> PRT

<213> Lama glama

<400> 12

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Asp Asn Tyr
        20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Ala Ile Ser Trp Asn Gly Gly Ser Thr Tyr Tyr Asp Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Phe Gln Lys Leu Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Leu Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Cys Ala Ala Asn Pro Tyr Gly Ile Pro Gln Tyr Arg Glu Asn Arg
            100   105   110

Tyr Asp Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210> 13

<211> 128

<212> PRT

<213> Lama glama

<400> 13

Gln Val Gln Leu Val Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Arg Thr Ile Ser Asp Tyr
        20   25   30

Ala Ala Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Leu
        35   40   45

Ala Ser Val Thr Trp Gly Phe Gly Ser Thr Ser Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asp Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Thr Leu Glu Pro Asp Asp Thr Ser Val Tyr Tyr Cys
                85   90   95

Ala Ser Ser Pro Arg Tyr Cys Ala Gly Tyr Arg Cys Tyr Val Thr Ala
                100   105   110

Ser Glu Phe Asp Ser Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
                115   120   125

<210>   14

<211>   128

<212>   PRT

<213>   Lama glama

<400>   14

Gln Val Lys Leu Glu Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Arg Thr Ile Ser Asp Tyr
                20   25   30

Ala Ala Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Leu
                35   40   45

Ala Ser Val Ser Trp Gly Phe Gly Ser Thr Tyr Tyr Ala Asp Ser Val
                50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asp Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Thr Leu Glu Pro Asp Asp Thr Ser Val Tyr Tyr Cys
                85   90   95

Ala Ser Ser Pro Arg Tyr Cys Ala Gly Tyr Arg Cys Tyr Ala Thr Ala
                100   105   110

Ser Glu Phe Asp Ser Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
                115   120   125

<210> 15

<211> 128

<212> PRT

<213> Lama glama

<400> 15

Gln Val Gln Leu Gln Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Arg Thr Ile Ser Asp Tyr
            20   25   30

Ala Ala Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Leu
            35   40   45

Ala Ser Val Thr Trp Gly Phe Gly Ser Thr Tyr Tyr Ala Asp Ser Val
            50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asp Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Thr Leu Glu Pro Asp Asp Thr Ser Ala Tyr Tyr Cys
                85   90   95

Ala Ser Ser Pro Arg Tyr Cys Ala Gly Tyr Arg Cys Tyr Val Thr Ala
            100   105   110

Ser Glu Phe Asp Ser Trp Gly Pro Gly Thr Gln Val Thr Val Ser Ser
            115   120   125

<210> 16

<211> 126

<212> PRT

<213> Lama glama

<400> 16

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ser Phe Ser Ser Tyr
            20   25   30

```
Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu His Glu Phe Val
        35                  40                  45

Ala Gly Ile Trp Arg Ser Gly Val Ser Leu Tyr Tyr Thr Asp Ser Val
        50                  55                  60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Met Thr Val Ser
65                  70                  75                  80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Ala Glu Ala Thr Phe Pro Thr Trp Ser Arg Gly Arg Phe Ala Asp
            100                 105                 110

Tyr Asp Tyr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125


<210>   17

<211>   126

<212>   PRT

<213>   Lama glama


<400>   17

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Arg Ser Phe Ser Ser Tyr
        20                  25                  30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Asp His Glu Phe Val
        35                  40                  45

Ala Gly Ile Trp Arg Ser Gly Val Ser Leu Tyr Tyr Ala Asp Ser Val
        50                  55                  60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Met Thr Val Ser
65                  70                  75                  80

Leu Gln Met Asn Gly Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
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Ala Ala Glu Ala Thr Phe Pro Thr Trp Asn Arg Gly Thr Phe Ala Asp
            100   105   110

Tyr Asp Tyr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120   125

<210> 18

<211> 126

<212> PRT

<213> Lama glama

<400> 18

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ser Phe Ser Ser Tyr
            20   25   30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu His Glu Phe Val
            35   40   45

Ala Gly Ile Trp Arg Ser Gly Val Ser Leu Tyr Tyr Ala Asp Ser Val
            50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Met Thr Val Ser
65   70   75   80

Leu Gln Met Asn Gly Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Glu Ala Thr Phe Pro Thr Trp Asn Arg Gly Ser Phe Ala Asp
            100   105   110

Tyr Asp Tyr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120   125

<210> 19

<211> 126

<212> PRT

<213> Lama glama

<400> 19

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ser Phe Ser Ser Tyr
            20   25   30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu His Glu Phe Val
            35   40   45

Ala Gly Ile Trp Arg Ser Gly Val Ser Leu Tyr Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Met Thr Val Ser
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Glu Ala Thr Phe Pro Thr Trp Asn Arg Gly Arg Phe Ala Asp
            100   105   110

Tyr Asp Tyr Ser Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120   125

<210> 20

<211> 120

<212> PRT

<213> Lama glama

<400> 20

Ala Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Gly Thr Phe Ser Arg Tyr
            20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Arg Ile Gly Tyr Ser Gly Arg Ser Ile Ser Tyr Ala Thr Ser Val
        50   55   60

Glu Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ser Leu Val Ser Gly Thr Leu Tyr Gln Ala Asp Tyr Trp Gly Gln
                100   105   110

Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 21

<211> 120

<212> PRT

<213> Lama glama

<400> 21

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Gly Thr Phe Ser Arg Tyr
            20   25   30

Ala Met Gly Trp Phe Arg Gln Pro Pro Gly Lys Glu Arg Asp Phe Val
            35   40   45

Ala Arg Ile Gly Tyr Ser Gly Gln Ser Ile Ser Tyr Ala Thr Ser Val
            50   55   60

Glu Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ser Leu Val Ser Gly Thr Leu Tyr Lys Pro Asn Tyr Trp Gly Gln
                100   105   110

Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 22

<211> 121

<212> PRT

<213> Lama glama

<400> 22

Gln Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Tyr Thr Val Gly
            20   25   30

Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile
            35   40   45

Ser Trp Ser Gly Gly Ser Ala Leu Tyr Ala Asp Ser Val Lys Gly Arg
        50   55   60

Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met
65   70   75   80

Gly Ser Leu Glu Pro Glu Asp Thr Ala Tyr Tyr Ser Cys Ala Ala Pro
                85   90   95

Gly Thr Arg Tyr Tyr Gly Ser Asn Gln Val Asn Tyr Asn Tyr Trp Gly
            100   105   110

Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 23

<211> 121

<212> PRT

<213> Lama glama

<400> 23

Gln Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Tyr Thr Val Gly
            20   25   30

Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile
        35   40   45

Asp Trp Ser Gly Gly Ser Ala Leu Tyr Ala Asp Ser Val Lys Gly Arg
    50   55   60

Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Val Tyr Leu Gln Met
65   70   75   80

Gly Ser Leu Glu Pro Glu Asp Thr Ala Val Tyr Trp Cys Ala Ala Pro
                85   90   95

Gly Thr Arg Tyr His Gly Arg Asn Gln Val Asn Tyr Asn Tyr Trp Gly
            100   105   110

Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 24

<211> 116

<212> PRT

<213> Lama glama

<400> 24

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ser Ser Asn Tyr
            20   25   30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ser Ser Ile Asn Ser Arg Thr Gly Ser Ile Thr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Thr Leu Asp Asn Ala Lys Asn Thr Leu Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ser Arg Val Asp Asp Arg Val Ser Arg Gly Gln Gly Thr Gln Val
            100   105   110

Thr Val Ser Ser
         115

<210> 25

<211> 120

<212> PRT

<213> Lama glama

<400> 25

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Ile Ser Ser Phe
            20   25   30

Arg Met Gly Trp Phe Arg Arg Ala Pro Gly Glu Glu Arg Glu Phe Val
            35   40   45

Ala Phe Val Arg Ser Asn Gly Thr Ser Thr Tyr Tyr Ala Asp Ser Val
        50   55   60

Glu Gly Arg Phe Thr Ile Thr Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Arg Met Asp Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Ala Thr Arg Asp Tyr Gly Gly Ser Phe Asp Tyr Trp Gly Gln
            100   105   110

Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 26

<211> 120

<212> PRT

<213> Lama glama

<400> 26

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Phe
            20   25   30

Arg Met Gly Trp Phe Arg Arg Ala Pro Gly Glu Glu Arg Glu Phe Val
        35   40   45

Ala Phe Val Arg Ser Asn Gly Thr Ser Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Glu Gly Arg Phe Thr Ile Thr Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Arg Met Asp Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Ala Ala Thr Arg Asp Tyr Gly Gly Ser Phe Asp Tyr Trp Gly Gln
            100   105   110

Gly Thr Gln Val Ile Val Ser Ser
        115   120

<210>   27

<211>   116

<212>   PRT

<213>   Lama glama

<400>   27

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Asn Tyr
            20   25   30

Ala Met Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Ile Glu Trp Val
        35   40   45

Ser Ser Ile Asn Asn Arg Asn Asp His Ile Thr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ala Arg Asp Asn Ala Asn Asn Ile Leu Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ser Arg Val Asp Asp Arg Val Ser Arg Gly Gln Gly Thr Gln Val
            100   105   110

Thr Val Ser Ser
        115

<210>   28

<211>   124

<212>   PRT

<213>   Lama glama

<400>   28

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
            20   25   30

Gly Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Leu Val
        35   40   45

Val Ala Ile Asn Arg Ser Gly Gly Ala Thr Ser Tyr Ala Thr Ser Val
    50   55   60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Met Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Asn Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Arg Asp Pro Thr Arg Thr Tyr Ser Ser Tyr Phe Glu Tyr Thr
            100   105   110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210>   29

<211>   128

<212> PRT

<213> Lama glama

<400> 29

Gln Val Gln Leu Gln Glu Ser Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Thr Leu Ser Cys Val Ala Ser Gly Arg Thr Ile Ser Asp Tyr
            20   25   30

Ala Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Ser Ile Ser Trp Gly Gly Gly Phe Thr Ala Phe Ala Asp Ser Met
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Thr His Thr Leu Glu Pro Asp Asp Thr Ser Val Tyr Tyr Cys
                85   90   95

Ala Ser Ser Arg Arg Tyr Cys Thr Gly Tyr Arg Cys Tyr Ala Thr Ala
            100   105   110

Ser Glu Phe Asp Ser Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210> 30

<211> 117

<212> PRT

<213> Lama glama

<400> 30

Gln Val Gln Leu Gln Glu Ser Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Ser Ile Phe Ser Leu Leu
            20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Leu Val
            35   40   45

Ala Ser Val Ser Thr His Ser Asn Thr Asn Tyr Ala Asp Ser Val Lys
    50   55   60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65   70   75   80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Asn
            85   90   95

Ala Gly Gly Arg Tyr Ser Ala Arg Val Tyr Trp Gly Gln Gly Thr Gln
            100   105   110

Val Thr Val Ser Ser
        115

<210>   31

<211>   128

<212>   PRT

<213>   Lama glama

<400>   31

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ser Asp Asp Tyr
            20   25   30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
            35   40   45

Ser Cys Ile Ser Ser Ser Asp Gly Val Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Ala Asp Ser Leu Pro Leu Cys Phe Ser Gly Ser Tyr Tyr His Pro
            100   105   110

Tyr Glu Tyr Asp Tyr Leu Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210>   32

<211>   133

<212>   PRT

<213>   Lama glama

<400>   32

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Leu Glu Gly Val
        35   40   45

Ser Met Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Asp Gln Asn Ala Arg Leu Phe Arg Leu Trp Val Val Thr Gly
            100   105   110

Thr Gly Pro Val Asp Asn Ala Leu Asp Ala Trp Gly Gln Gly Thr Leu
        115   120   125

Val Thr Val Ser Ser
    130

<210>   33

<211>   123

<212>   PRT

<213>   Lama glama

<400> 33

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30

Asp Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Glu Val
        35   40   45

Ser Cys Ile Ser Asn Ile Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Ser Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Asp Ile Tyr Val Arg Cys Val His Gly Leu Ser Pro Gly Tyr
            100   105   110

Trp Gly Gln Gly Ile Gln Val Thr Val Ser Ser
        115   120

<210> 34

<211> 125

<212> PRT

<213> Lama glama

<400> 34

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr
            20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Gly Ile Thr Ser Ser Gly Gly Tyr Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Gly Phe Arg Val Gly Ile Ala Leu Asp Leu Lys Gly Arg Tyr
            100   105   110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210>   35

<211>   123

<212>   PRT

<213>   Lama glama

<400>   35

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Leu Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ile Ser Gly Arg Ile Leu Gly Ser Tyr
            20   25   30

Ala Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Gln Phe Val
            35   40   45

Ala Ala Ile Gly Trp Ser Tyr Gly Asn Thr Tyr Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Gly Asp Thr Tyr Leu Thr Gly Arg Pro Asn Glu Tyr Ala Tyr
            100   105   110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210>   36

<211> 115

<212> PRT

<213> Lama glama

<400> 36

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Phe Ser Arg Phe
            20   25   30

Gly Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Val Glu Trp Val
            35   40   45

Ser Gly Ile Ser Ser Leu Gly Asp Ser Thr Leu Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Thr Ile Gly Gly Ser Leu Asn Pro Gly Gly Gln Gly Thr Gln Val Thr
            100   105   110

Val Ser Ser
        115

<210> 37

<211> 115

<212> PRT

<213> Lama glama

<400> 37

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asn Phe
            20   25   30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Glu Pro Glu Trp Val
        35   40   45

Ser Ser Ile Ser Gly Ser Gly Ser Asn Thr Ile Tyr Ala Asp Ser Val
    50   55   60

Lys Asp Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Thr Leu Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Gln Val Thr
            100   105   110

Val Ser Ser
        115

<210>   38

<211>   114

<212>   PRT

<213>   Lama glama

<400>   38

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Thr Ala Ser Gly Phe Thr Phe Ser Ser Phe
            20   25   30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ser Ala Ile Ser Ser Asp Ser Gly Thr Lys Asn Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Met Leu Phe
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Val Ile Gly Arg Gly Ser Pro Ser Ser Gln Gly Thr Gln Val Thr Val
            100   105   110

Ser Ser

<210> 39

<211> 114

<212> PRT

<213> Lama glama

<400> 39

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Thr Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ser Ala Ile Ser Ala Asp Gly Ser Asp Lys Arg Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Lys Met Leu Thr
65   70   75   80

Leu Asp Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Val Ile Gly Arg Gly Ser Pro Ala Ser Gln Gly Thr Gln Val Thr Val
            100   105   110

Ser Ser

<210> 40

<211> 253

<212> PRT

<213> Lama glama

<400> 40

```
Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Phe Ser Arg Phe
            20              25              30

Gly Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Val Glu Trp Val
        35              40              45

Ser Gly Ile Ser Ser Leu Gly Asp Ser Thr Leu Tyr Ala Asp Ser Val
    50              55              60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65              70              75              80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Thr Ile Gly Gly Ser Leu Asn Pro Gly Gly Gln Gly Thr Gln Val Thr
            100             105             110

Val Ser Ser Glu Pro Lys Thr Pro Lys Pro Gln Pro Ala Ala Ala Gln
        115             120             125

Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser
    130             135             140

Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Asn Asn Tyr Asn
145             150             155             160

Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
            165             170             175

Ala Ile Ser Trp Asn Gly Gly Ser Thr Tyr Tyr Asp Asp Ser Val Lys
        180             185             190

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Asn Asn Leu Val Tyr Leu
        195             200             205

Gln Met Asn Ser Leu Asn Phe Glu Asp Thr Ala Val Tyr Tyr Cys Ala
    210             215             220

Cys Ala Ala Asn Pro Tyr Gly Ile Pro Gln Tyr Arg Glu Asn Arg Tyr
225             230             235             240

Asp Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            245             250
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<210> 41

<211> 247

<212> PRT

<213> Lama glama

<400> 41

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asn Phe
            20   25   30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Glu Pro Glu Trp Val
        35   40   45

Ser Ser Ile Ser Gly Ser Gly Ser Asn Thr Ile Tyr Ala Asp Ser Val
    50   55   60

Lys Asp Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Thr Leu Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Gln Val Thr
            100   105   110

Val Ser Ser Glu Pro Lys Thr Pro Lys Pro Gln Pro Ala Ala Ala Ala
        115   120   125

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp Ser
    130   135   140

Leu Arg Leu Ser Cys Val Ala Ser Gly Gly Thr Phe Ser Arg Tyr Ala
145   150   155   160

Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
                165   170   175

Arg Ile Gly Tyr Ser Gly Arg Ser Ile Ser Tyr Ala Thr Ser Val Glu
            180   185   190

Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
        195   200   205

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
        210   215   220

Ser Leu Val Ser Gly Thr Leu Tyr Gln Ala Asp Tyr Trp Gly Gln Gly
225   230   235   240

Thr Gln Val Thr Val Ser Ser
                245

<210> 42

<211> 252

<212> PRT

<213> Lama glama

<400> 42

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Thr Ala Ser Gly Phe Thr Phe Ser Ser Phe
        20   25   30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ser Ala Ile Ser Ser Asp Ser Gly Thr Lys Asn Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Met Leu Phe
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Val Ile Gly Arg Gly Ser Pro Ser Ser Gln Gly Thr Gln Val Thr Val
            100   105   110

Ser Ser Glu Pro Lys Thr Pro Lys Pro Gln Pro Ala Ala Ala Gln Val
        115   120   125

Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu
    130   135   140

```
Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr Asn Met
145             150             155             160

Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Gly
            165             170             175

Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val Glu Gly
            180             185             190

Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr Leu Gln
        195             200             205

Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys Ala Ser
    210             215             220

Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp Tyr Asp
225             230             235             240

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            245             250
```

<210> 43

<211> 115

<212> PRT

<213> Lama glama

<400> 43

```
Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Asp Phe Ser Val Ser
            20              25              30

Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Ser Glu Ile Asn Thr Asn Gly Leu Ile Thr Lys Tyr Val Asp Ser Val
    50              55              60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65              70              75              80
```

Leu Gln Met Asp Ser Leu Ile Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95

Ala Arg Ser Pro Ser Gly Ser Phe Arg Gly Gln Gly Thr Gln Val Thr
            100   105   110

Val Ser Ser
        115

<210>   44

<211>   121

<212>   PRT

<213>   Lama glama

<400>   44

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Ile Phe Arg Val Asn
            20   25   30

Ala Met Gly Trp Tyr Arg Gln Val Pro Gly Asn Gln Arg Glu Phe Val
        35   40   45

Ala Ile Ile Thr Ser Gly Asp Asn Leu Asn Tyr Ala Asp Ala Val Lys
    50   55   60

Gly Arg Phe Thr Ile Ser Thr Asp Asn Val Lys Lys Thr Val Tyr Leu
65   70   75   80

Gln Met Asn Val Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Asn
                85   90   95

Ala Ile Leu Gln Thr Ser Arg Trp Ser Ile Pro Ser Asn Tyr Trp Gly
            100   105   110

Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210>   45

<211>   123

<212>   PRT

<213> Lama glama

<400> 45

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Tyr
            20   25   30

Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
            35   40   45

Ser Thr Val Asn Thr Asn Gly Leu Ile Thr Arg Tyr Ala Asp Ser Val
            50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Tyr Thr Leu Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Thr Lys Val Val Pro Pro Tyr Ser Asp Asp Ser Arg Thr Asn Ala Asp
            100   105   110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 46

<211> 129

<212> PRT

<213> Lama glama

<400> 46

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asp His
            20   25   30

Ser Gly Tyr Thr Tyr Thr Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys
            35   40   45

Glu Arg Glu Phe Val Ala Arg Ile Tyr Trp Ser Ser Gly Asn Thr Tyr
    50   55   60

Tyr Ala Asp Ser Val Lys Gly Arg Phe Ala Ile Ser Arg Asp Ile Ala
65   70   75   80

Lys Asn Thr Val Asp Leu Thr Met Asn Asn Leu Glu Pro Glu Asp Thr
                85   90   95

Ala Val Tyr Tyr Cys Ala Ala Arg Asp Gly Ile Pro Thr Ser Arg Ser
            100   105   110

Val Glu Ser Tyr Asn Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
            115   120   125

Ser

<210>   47

<211>   127

<212>   PRT

<213>   Lama glama

<400>   47

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Ser Ala His
            20   25   30

Ser Val Tyr Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg
            35   40   45

Glu Phe Val Ala Arg Ile Tyr Trp Ser Ser Ala Asn Thr Tyr Tyr Ala
    50   55   60

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
65   70   75   80

Thr Val Asp Leu Leu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val
                85   90   95

Tyr Tyr Cys Ala Ala Arg Asp Gly Ile Pro Thr Ser Arg Thr Val Gly
            100   105   110

Ser Tyr Asn Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210>   48

<211>   124

<212>   PRT

<213>   Lama glama

<400>   48

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Ile Phe Arg Val Asn
            20   25   30

Ala Met Gly Trp Tyr Arg Gln Val Pro Gly Asn Gln Arg Glu Phe Val
            35   40   45

Ala Ile Ile Thr Ser Ser Asp Thr Asn Asp Thr Thr Asn Tyr Ala Asp
        50   55   60

Ala Val Lys Gly Arg Phe Thr Ile Ser Thr Asp Asn Val Lys Lys Thr
65   70   75   80

Val Tyr Leu Gln Met Asn Val Leu Lys Pro Glu Asp Thr Ala Val Tyr
                85   90   95

Tyr Cys Asn Ala Val Leu Gln Thr Ser Arg Trp Ser Ile Pro Ser Asn
            100   105   110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210>   49

<211>   123

<212>   PRT

<213>   Lama glama

<400>   49

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Thr Thr Ser Gly Arg Thr Ile Ser Val Tyr
            20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Ser Ile Ser Gly Ser Gly Ala Ile Thr Pro Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Asn Pro Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Ala Ser Arg Tyr Ala Arg Tyr Arg Asp Val His Ala Tyr Asp Tyr
            100   105   110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 50

<211> 124

<212> PRT

<213> Lama glama

<400> 50

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Thr Arg Thr Phe Ser Arg Tyr
            20   25   30

Val Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Thr Ile Ser Trp Asn Gly Glu His Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Tyr Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Gly Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                    85   90   95

Ala Ala Arg Ser Phe Trp Gly Tyr Asn Val Glu Gln Arg Asp Phe Gly
                100   105   110

Ser Trp Gly Gln Gly Thr Pro Val Thr Val Ser Ser
            115   120

<210>   51

<211>   120

<212>   PRT

<213>   Lama glama

<400>   51

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Ile Phe Arg Val Asn
                20   25   30

Ala Met Gly Trp Tyr Arg Gln Val Pro Gly Asn Gln Arg Glu Phe Val
            35   40   45

Ala Ile Ile Thr Asn Asp Thr Thr Asn Tyr Ala Asp Ala Val Lys Gly
        50   55   60

Arg Phe Thr Ile Ser Thr Asp Asn Val Lys Lys Thr Val Tyr Leu Gln
65   70   75   80

Met Asn Val Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr
                85   90   95

Val Leu Gln Thr Ser Arg Trp Asn Ile Pro Thr Asn Tyr Trp Gly Gln
                100   105   110

Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210>   52

<211>   120

<212> PRT

<213> Lama glama

<400> 52

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Ile Phe Arg Val Asn
            20   25   30

Ala Met Gly Trp Tyr Arg Gln Val Pro Gly Asn Gln Arg Glu Phe Val
            35   40   45

Ala Ile Ile Ser Gly Asp Thr Thr Asn Tyr Ala Asp Ala Val Lys Gly
    50   55   60

Arg Phe Thr Ile Ser Thr Asp Asn Val Lys Lys Thr Val Tyr Leu Gln
65   70   75   80

Met Asn Val Leu Glu Ser Glu Asp Thr Ala Val Tyr Tyr Cys Asn Ala
            85   90   95

Val Leu Gln Thr Ser Arg Trp Ser Ile Pro Ser Asn Tyr Trp Gly Gln
            100   105   110

Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 53

<211> 116

<212> PRT

<213> Lama glama

<400> 53

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ala Cys Val Ala Ser Gly Ser Ile Phe Ser Ile Asp
            20   25   30

Val Met Gly Trp Tyr Arg Gln Ala Pro Gly Gln Gln Arg Glu Leu Val
            35   40   45

```
Ala Thr Ile Thr Asn Ser Trp Thr Thr Asn Tyr Ala Asp Ser Val Lys
    50                  55              60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Val Val Tyr Leu
65                  70              75                  80

Gln Met Asn Ser Leu Lys Leu Glu Asp Thr Ala Val Tyr Tyr Cys Asn
                85              90                  95

Ala Arg Arg Trp Tyr Gln Pro Glu Ala Trp Gly Gln Gly Thr Gln Val
            100             105             110

Thr Val Ser Ser
        115


<210>  54

<211>  115

<212>  PRT

<213>  Lama glama


<400>  54

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr His
            20              25              30

Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Ser Thr Ile Asn Thr Asn Gly Leu Ile Thr Asp Tyr Ile His Ser Val
    50                  55              60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65                  70              75                  80

Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85              90                  95

Ala Leu Asn Gln Ala Gly Leu Ser Arg Gly Gln Gly Thr Gln Val Thr
            100             105             110
```

Val Ser Ser
        115

<210> 55

<211> 126

<212> PRT

<213> Lama glama

<400> 55

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Arg Arg Thr Phe Ser Gly Tyr
            20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Val Val Ser Gly Thr Gly Thr Ile Ala Tyr Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Leu Tyr Tyr Cys
                85   90   95

Ala Val Gly Pro Ser Ser Ser Arg Trp Tyr Tyr Arg Gly Ala Ser Leu
            100   105   110

Val Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
            115   120   125

<210> 56

<211> 123

<212> PRT

<213> Lama glama

<400> 56

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

```
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Glu Phe Glu Asn His
        20              25              30

Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Ser Thr Val Asn Thr Asn Gly Leu Ile Thr Arg Tyr Ala Asp Ser Val
        50              55              60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Tyr Thr Leu Tyr
65              70              75              80

Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85              90              95

Thr Lys Val Leu Pro Pro Tyr Ser Asp Asp Ser Arg Thr Asn Ala Asp
            100             105             110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115             120


<210>  57

<211>  124

<212>  PRT

<213>  Lama glama


<400>  57

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1               5               10              15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Gly Thr Leu Ser Ser Tyr
        20              25              30

Ile Thr Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35              40              45

Gly Ala Val Ser Trp Ser Ser Ser Thr Ile Val Tyr Ala Asp Ser Val
        50              55              60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn His Gln Asn Thr Val Tyr
65              70              75              80
```

Leu Gln Met Asp Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Arg Pro Tyr Gln Lys Tyr Asn Trp Ala Ser Ala Ser Tyr Asn
            100   105   110

Val Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser   .
        115   120

<210> 58

<211> 124

<212> PRT

<213> Lama glama

<400> 58

Gln Val Gln Leu Gln Asp Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Gly Thr Phe Ser Ser Ile
            20   25   30

Ile Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Gly Ala Val Ser Trp Ser Gly Gly Thr Thr Val Tyr Ala Asp Ser Val
    50   55   60

Leu Gly Arg Phe Glu Ile Ser Arg Asp Ser Ala Arg Lys Ser Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Arg Pro Tyr Gln Lys Tyr Asn Trp Ala Ser Ala Ser Tyr Asn
            100   105   110

Val Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 59

<211> 264

<212> PRT

<213> Lama glama

<400> 59

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Gln Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Asn Asn Tyr
            20                  25                  30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35                  40                  45

Ala Ala Ile Ser Trp Asn Gly Gly Ser Thr Tyr Tyr Asp Asp Ser Val
        50                  55                  60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Asn Asn Leu Val Tyr
65                  70                  75                  80

Leu Gln Met Asn Ser Leu Asn Phe Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Cys Ala Ala Asn Pro Tyr Gly Ile Pro Gln Tyr Arg Glu Asn Arg
            100                 105                 110

Tyr Asp Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Glu Pro
        115                 120                 125

Lys Thr Pro Lys Pro Gln Pro Ala Ala Ala Gln Val Lys Leu Glu Glu
    130                 135                 140

Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys
145                 150                 155                 160

Ala Ala Ser Gly Arg Thr Phe Asn Asn Tyr Asn Met Gly Trp Phe Arg
            165                 170                 175

Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile Ser Trp Asn
        180                 185                 190

Gly Gly Ser Thr Tyr Tyr Asp Asp Ser Val Lys Gly Arg Phe Thr Ile
        195                 200                 205

Ser Arg Asp Asn Ala Asn Asn Leu Val Tyr Leu Gln Met Asn Ser Leu
    210                 215                 220
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Asn Phe Glu Asp Thr Ala Val Tyr Tyr Cys Ala Cys Ala Ala Asn Pro
225   230   235   240

Tyr Gly Ile Pro Gln Tyr Arg Glu Asn Arg Tyr Asp Phe Trp Gly Gln
                245   250   255

Gly Thr Gln Val Thr Val Ser Ser
                260

<210>   60

<211>   264

<212>   PRT

<213>   Lama glama

<400>   60

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr
                20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
                35   40   45

Ala Gly Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val
                50   55   60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys
                85   90   95

Ala Ser Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp
                100   105   110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Glu Pro
                115   120   125

Lys Thr Pro Lys Pro Gln Pro Ala Ala Ala Gln Val Gln Leu Gln Glu
                130   135   140

Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys
145   150   155   160

Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr Asn Met Gly Trp Phe Arg
                165   170   175

Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Gly Ile Ser Trp Asn
                180   185   190

Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val Glu Gly Arg Phe Thr Ile
            195   200   205

Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr Leu Gln Met Asn Ser Leu
        210   215   220

Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys Ala Ser Lys Gly Arg Pro
225   230   235   240

Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp Tyr Asp Tyr Trp Gly Gln
                245   250   255

Gly Thr Gln Val Thr Val Ser Ser
                260

<210> 61

<211> 264

<212> PRT

<213> Lama glama

<400> 61

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Thr Tyr
                20   25   30

Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Gly Ile Ser Trp Asn Gly Gly Ser Ile Tyr Tyr Thr Ser Ser Val
        50   55   60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Val Tyr Tyr Cys
                    85   90   95

Ala Ser Lys Gly Arg Pro Tyr Gly Val Pro Ser Pro Arg Gln Gly Asp
                100   105   110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Glu Pro
            115   120   125

Lys Thr Pro Lys Pro Gln Pro Ala Ala Ala Gln Val Lys Leu Glu Glu
    130   135   140

Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys
145   150   155   160

Ala Ala Ser Gly Arg Thr Phe Asn Asn Tyr Asn Met Gly Trp Phe Arg
                165   170   175

Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile Ser Trp Asn
                180   185   190

Gly Gly Ser Thr Tyr Tyr Asp Asp Ser Val Lys Gly Arg Phe Thr Ile
            195   200   205

Ser Arg Asp Asn Ala Asn Asn Leu Val Tyr Leu Gln Met Asn Ser Leu
    210   215   220

Asn Phe Glu Asp Thr Ala Val Tyr Tyr Cys Ala Cys Ala Ala Asn Pro
225   230   235   240

Tyr Gly Ile Pro Gln Tyr Arg Glu Asn Arg Tyr Asp Phe Trp Gly Gln
                245   250   255

Gly Thr Gln Val Thr Val Ser Ser
            260

<210> 62

<211> 128

<212> PRT

<213> Lama glama

<400> 62

Ala Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Val Val Ser Gly Thr Thr Phe Ser Ser Ala
          20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
          35   40   45

Gly Ala Ile Lys Trp Ser Gly Thr Ser Thr Tyr Tyr Thr Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Asn Leu Lys Pro Glu Asp Thr Gly Val Tyr Thr Cys
              85   90   95

Ala Ala Asp Arg Asp Arg Tyr Arg Asp Arg Met Gly Pro Met Thr Thr
          100   105   110

Thr Asp Phe Arg Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
          115   120   125

<210>   63

<211>   124

<212>   PRT

<213>   Lama glama

<400>   63

Gln Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Phe
          20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Arg Glu Arg Glu Phe Val
          35   40   45

Ala Ser Ile Gly Ser Ser Gly Ile Thr Thr Asn Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Gly Leu Cys Tyr Cys
                85   90   95

Ala Val Asn Arg Tyr Gly Ile Pro Tyr Arg Ser Gly Thr Gln Tyr Gln
            100   105   110

Asn Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 64

<211> 120

<212> PRT

<213> Lama glama

<400> 64

Glu Val Gln Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Phe Asn Asp Tyr
            20   25   30

Ala Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Asp Met Val
        35   40   45

Ala Thr Ile Ser Ile Gly Gly Arg Thr Tyr Tyr Ala Asp Ser Val Lys
    50   55   60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65   70   75   80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Val
                85   90   95

Ala His Arg Gln Thr Val Val Arg Gly Pro Tyr Leu Leu Trp Gly Gln
            100   105   110

Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 65

<211> 123

<212> PRT

<213> Lama glama

<400> 65

Gln Val Gln Leu Val Glu Ser Gly Gly Lys Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asn Tyr
            20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Gly Ser Gly Arg Ser Asn Ser Tyr Asn Tyr Tyr Ser Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Ala Ser Thr Asn Leu Trp Pro Arg Asp Arg Asn Leu Tyr Ala Tyr
            100   105   110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 66

<211> 125

<212> PRT

<213> Lama glama

<400> 66

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ser Leu Gly Ile Tyr
            20   25   30

Arg Met Gly Trp Phe Arg Gln Val Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Ala Ile Ser Trp Ser Gly Gly Thr Thr Arg Tyr Leu Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Ser Thr Lys Asn Ala Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Val Asp Ser Ser Gly Arg Leu Tyr Trp Thr Leu Ser Thr Ser Tyr
                100   105   110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210>   67

<211>   125

<212>   PRT

<213>   Lama glama

<400>   67

Gln Val Gln Leu Val Glu Phe Gly Gly Gly Leu Val Gln Ala Gly Asp
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ser Leu Gly Ile Tyr
            20   25   30

Lys Met Ala Trp Phe Arg Gln Val Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Ala Ala Ile Ser Trp Ser Gly Gly Thr Thr Arg Tyr Ile Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Leu Ser Arg Asp Asn Thr Lys Asn Met Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Val Asp Ser Ser Gly Arg Leu Tyr Trp Thr Leu Ser Thr Ser Tyr
                100   105   110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210> 68

<211> 124

<212> PRT

<213> Lama glama

<400> 68

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Ser Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Pro Tyr
            20   25   30

Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Leu
        35   40   45

Ala Gly Val Thr Trp Ser Gly Ser Ser Thr Phe Tyr Gly Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ala Ser Arg Asp Ser Ala Lys Asn Thr Val Thr
65   70   75   80

Leu Glu Met Asn Ser Leu Asn Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Ala Tyr Gly Gly Gly Leu Tyr Arg Asp Pro Arg Ser Tyr Asp
            100   105   110

Tyr Trp Gly Arg Gly Thr Gln Val Thr Val Ser Ser
        115   120

<210> 69

<211> 131

<212> PRT

<213> Lama glama

<400> 69

Ala Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Ala Trp
        20   .   25   30

Pro Ile Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
        35   40   45

Ser Cys Ile Arg Asp Gly Thr Thr Tyr Tyr Ala Asp Ser Val Lys Gly
    50   55   60

Arg Phe Thr Ile Ser Ser Asp Asn Ala Asn Asn Thr Val Tyr Leu Gln
65   70   75   80

Thr Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
            85   90   95

Pro Ser Gly Pro Ala Thr Gly Ser Ser His Thr Phe Gly Ile Tyr Trp
            100   105   110

Asn Leu Arg Asp Asp Tyr Asp Asn Trp Gly Gln Gly Thr Gln Val Thr
        115   120   125

Val Ser Ser
    130

<210>   70

<211>   126

<212>   PRT

<213>   Lama glama

<400>   70

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp His Tyr
        20   25   30

Thr Ile Gly Trp Phe Arg Gln Val Pro Gly Lys Glu Arg Glu Gly Val
        35   40   45

Ser Cys Ile Ser Ser Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Thr Leu Glu Pro Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Gly Gly Leu Leu Leu Arg Val Glu Glu Leu Gln Ala Ser Asp
            100   105   110

Tyr Asp Tyr Trp Gly Gln Gly Ile Gln Val Thr Val Ser Ser
        115   120   125

<210> 71

<211> 128

<212> PRT

<213> Lama glama

<400> 71

Ala Val Gln Leu Val Asp Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Leu Asp Tyr Tyr
            20   25   30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
            35   40   45

Ala Cys Ile Ser Asn Ser Asp Gly Ser Thr Tyr Tyr Gly Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Thr Ala Asp Arg His Tyr Ser Ala Ser His His Pro Phe Ala Asp
            100   105   110

Phe Ala Phe Asn Ser Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115   120   125

<210> 72

<211> 120

<212> PRT

<213> Lama glama

<400> 72

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Tyr Gly Leu Thr Phe Trp Arg Ala
                20   25   30

Ala Met Ala Trp Phe Arg Arg Ala Pro Gly Lys Glu Arg Glu Leu Val
        35   40   45

Val Ala Arg Asn Trp Gly Asp Gly Ser Thr Arg Tyr Ala Asp Ser Val
        50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Val Arg Thr Tyr Gly Ser Ala Thr Tyr Asp Ile Trp Gly Gln
                100   105   110

Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 73

<211> 123

<212> PRT

<213> Lama glama

<400> 73

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Asp Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ile Phe Ser Gly Arg Thr Phe Ala Asn Tyr
                20   25   30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
        35   40   45

Ala Ala Ile Asn Arg Asn Gly Gly Thr Thr Asn Tyr Ala Asp Ala Leu
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Ala Phe
65   70   75   80

Leu Gln Met Asn Ser Leu Lys Pro Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Ala Arg Glu Trp Pro Phe Ser Thr Ile Pro Ser Gly Trp Arg Tyr
                100   105   110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            115   120

<210> 74

<211> 125

<212> PRT

<213> Lama glama

<400> 74

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Trp Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Pro Thr Ala Ser Ser His
                20   25   30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35   40   45

Val Gly Ile Asn Arg Gly Gly Val Thr Arg Asp Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Ala Val Ser Arg Asp Asn Val Lys Asn Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Arg Leu Lys Pro Glu Asp Ser Ala Ile Tyr Ile Cys
                85   90   95

Ala Ala Arg Pro Glu Tyr Ser Phe Thr Ala Met Ser Lys Gly Asp Met
                100   105   110

Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
        115   120   125

<210>   75

<211>   23

<212>   DNA

<213>   Lama glama

<400>   75
ggctgagctc ggtggtcctg gct   23

<210>   76

<211>   45

<212>   DNA

<213>   Lama glama

<400>   76
aactggaaga attcgcggcc gcaggaattt ttttttttt ttttt   45

<210>   77

<211>   23

<212>   DNA

<213>   Lama glama

<400>   77
gaggtbcarc tgcaggastc ygg   23

<210>   78

<211>   30

<212>   DNA

<213>   Lama glama

<400>   78
gtgtgcggcc gctgaggaga crgtgaccwg   30

<210>   79

<211> 20

<212> DNA

<213> Lama glama

<400> 79
ggataacaat ttcacacagg   20

<210> 80

<211> 19

<212> DNA

<213> Lama glama

<400> 80
cacgacgttg taaaacgac   19

<210> 81

<211> 20

<212> DNA

<213> Lama glama

<400> 81
ctggccccag aagtcatacc   20

<210> 82

<211> 19

<212> DNA

<213> Lama glama

<400> 82
tgtgcatgtg cagcaaacc   19

<210> 83

<211> 46

<212> DNA

<213> Lama glama

<400> 83
gtcctcgcaa ctgcggccca gccggcctgt gcatgtgcag caaacc 46

<210> 84

<211> 42

<212> DNA

<213> Lama glama

<400> 84
gtcctcgcaa ctgcgcggcc gcctggcccc agaagtcata cc 42